

PASTBEHAVIOR RESEARCH

When the Resale Price Becomes Part of the Sale

When should a company make the future value of its product part of the reason someone buys it today? Fourteen cases across five decades give a conditional answer, and it is not the one the resale industry sells.

The cohort runs from the 1974 economics literature on used textbooks to the 2026 secondary markets in watches, phones, sneakers and cars. It includes four companies that guaranteed a future value and three that stopped, one that tried to abolish resale and reversed inside a week, and two categories where the resale price stopped being a floor and became the reason to buy. Every material claim carries an evidence label.

FACT	COMPANY CLAIM	REPORTED	ESTIMATE	INFERENCE	UNRESOLVED
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Every material claim carries one of these labels, defined in the methodology.
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01 / THE ANSWER

Buyers price the second number whether or not you show it. What moved primary transactions was making it certain, not making it visible.

The strongest identified evidence in this cohort says buyers are already computing the second number. In the college textbook market, student purchase behaviour tracked the probability that a new edition would appear and destroy resale value, not the price on the shelf. Demand elasticity for a book certain not to be revised was about −0.9. For the same book facing certain revision, it was about −3.7. FACT The implied discount rate was low enough to rule out myopia and most forms of hyperbolic discounting.

That result is the load-bearing wall of this study, and it is worth stating precisely, because it is easy to overclaim. What it establishes is that buyers incorporated expected resale value into willingness to pay *before* modern price discovery existed, in a market where nobody surfaced the number for them. Students in the late 1990s were doing this arithmetic without a marketplace, a chart, or a checkout module.

What it does not establish is that making the number salient, credible, precise or immediate cannot increase the effect. The evidence here does not show that simply showing buyers a number creates incremental demand. It also does not show that it fails to. No public source tests it directly, and that gap is real rather than rhetorical. UNRESOLVED

The variable that moved primary transactions was never visibility. It was the conversion of an uncertain, illiquid future value into a certain, immediate one, at the counter, at the moment of purchase.

That distinction sorts the entire cohort. Every case where the second number measurably changed the first sale involved a company removing uncertainty, removing delay, or removing the transaction

entirely, and being paid for doing so. Every case where a company simply published or facilitated a residual value produced either nothing measurable or a reverse-logistics cost centre.

THE ECONOMIC FINDING	THE COMMERCIAL FINDING	THE RISK FINDING
Publisher revenue was close to invariant to how fast editions were revised. Simulated faster revision cycles reduced revenue in both disciplines tested, before counting the cost of revising. Killing the resale market did not pay, because buyers repriced the book. <u>FACT</u>	Surplus went to whoever controlled the instrument the second number was paid in. Store credit, bill credits, certification, a captive retailer. Producers who surfaced residual value without owning the redemption almost never captured it. <u>INFERENCE</u>	Guaranteeing a residual is not a marketing decision. It is writing a put option on your own used market. Industry losses on mis-set auto lease residuals were estimated at \$10.5 billion in 2000 alone. <u>ESTIMATE</u>

So the answer is conditional, and it is narrower than the market's answer. Surface the second number where independent data already says yours is better than the alternative. Facilitate where the customer is already standing in your channel. Capture where verification is expensive enough that buyers pay a premium for certainty. Underwrite where the uncertainty is about whether the *category* holds value rather than about the price level of a mature one. Otherwise leave it alone: a used unit that substitutes cleanly for a new one is a competitor, and dressing it up as a program does not change that.

These carry very different evidential weight. Section 10 grades each one, and only a single item in the framework is supported strongly enough to state as a rule.

02 / THE FOUR CHOICES

Four different decisions get filed under one word, and the confusion is where the money is lost.

Companies say "we're doing resale." In the record, they are doing one of four things with completely different economics, different risk owners, and different failure modes. The most expensive errors in this cohort came from executing one while believing they were executing another.

CHOICE A
Make it visible

Show the likely second number. No obligation, no inventory, no risk. The demand effect is the open question in the field: buyers were already estimating the number before anyone published it, and no public test isolates what publishing it adds.

Only useful as a comparison weapon. If your retained value is worse than a competitor's, publishing it is unilateral disarmament. This is why residual value is advertised in autos and watches and almost nowhere else.

CHOICE B
Facilitate

Make selling easier without guaranteeing price. Trade-in desks, branded resale sites, take-back programs. The customer keeps price risk. You take operating cost.

This is a reverse-logistics business wearing a marketing badge: intake, grading, cleaning, authentication, storage, shipping, returns. It survived where the customer was already in the store and died where the goods had to move.

CHOICE C
Capture

Participate economically in the second transaction. Certified pre-owned, in-house used inventory, buying the intermediary. You take inventory risk and earn a certainty premium.

Works only where buyers face real condition or authenticity risk. Rolex-certified watches carried premiums of roughly 16% to 42% over the same models from non-participating dealers. REPORTED Certified used cars carry about 4.3% to 4.7%. REPORTED

CHOICE D
Underwrite

Guarantee a future value. You now hold price risk on an asset you no longer control, over a horizon you cannot hedge, in a market your own future pricing decisions will move.

Tesla carried \$1.58 billion of resale value guarantee liability at 31 March 2016, up more than 20% in one quarter, and ended the program on 1 July. FACT

The four are not a ladder. They are alternatives with different preconditions, and the cohort contains companies that moved between them in both directions. What the cohort does not contain is a company that made residual value visible and captured the resulting demand without also owning either the certification or the redemption instrument.

The producer is almost always the last participant to notice, and the first move is almost always defensive.

The order below is the one the evidence supports across autos, textbooks, games, phones and watches. It is not the tidy version. In particular, steps three and four happen without the producer’s participation, and step six fails often enough to be treated as a predictable error rather than bad luck.

THE OBSERVED SEQUENCE

01	Recoverable value forms	The product holds enough value used that private resale starts. Nothing is published. The producer sees nothing.
02	A third party builds price discovery	Auto Lease Guide and Kelley Blue Book in cars. Amazon Marketplace in books. StockX and GOAT in sneakers. Chrono24 and WatchCharts in watches. In every case the price authority was independent and preceded any producer program by years. <u>FACT</u>
03	Buyers start pricing the exit before the entry	This is invisible from the inside. It shows up as elasticity that moves with resale-relevant events rather than with your own price. <u>FACT</u>
04	An intermediary captures the spread	College bookstores and used-book wholesalers. Grey-market watch dealers. GameStop. Carriers. Someone else's P&L is now built on your asset.
05	The producer notices, late	Usually because the intermediary has become large enough to be a strategic problem rather than because of any internal signal.
06	The first move is suppression, and it fails	Faster edition cycles. Region locks. Digital rights restrictions. Microsoft announced used-game restrictions on Xbox One in 2013 and reversed the policy within about a week after PlayStation 4 committed to leaving disc resale alone. <u>FACT</u>
07	The producer capture or underwrites	Certified pre-owned, in-house resale, buyback guarantees, or acquisition of the intermediary outright.
08	Secondary supply grows and risk lands somewhere	Either on the producer, who guaranteed it; on the finance arm, who priced it; or on the consumer, who now holds a depreciating asset in a fuller market.

Companies in this cohort acted too late to capture and too early to underwrite. Those are different errors with the same root: treating the second number as a marketing variable rather than a balance sheet one.

The timing evidence is unusually clean at both ends. The theoretical case that killing the used market does not pay was published in 1974. The empirical confirmation arrived in the 2000s. Pearson announced its digital-first restructuring, which removes the resale option entirely rather than shortening it, in 2019. FACT Rolex operated for decades alongside a vast independent secondary market before launching certified pre-owned in December 2022, and acquired the retailer that piloted it the following year. FACT

The mechanism was certainty, immediacy, or a currency the buyer could only spend with you.

Category uncertainty, priced and then retired

Tesla introduced a resale value guarantee in 2013, committing to buy back a Model S after roughly three years at a set fraction of the purchase price. The problem it solved was not depreciation. It was that nobody knew whether a used electric car from an unproven manufacturer would be worth anything at all. Three years later, with retained values reported above the guaranteed floor, the program ended.

REPORTED Tesla disclosed the associated liability at \$1.58 billion as of March 2016. FACT

Read the entry and the exit together and the lesson is precise: the guarantee was priced against category risk, and it was withdrawn the moment the category stopped being risky. It was never a permanent feature. It was the cost of getting a new asset class its first resale prices.

A currency redeemable in one place

GameStop's trade-in program is the cleanest example of capture in the cohort. Gross margin on pre-owned product ran near 48 cents on the dollar, against roughly 21 cents on new software and single digits on hardware. ESTIMATE The company has consistently told investors that trade-in drives market share and widens its price points. COMPANY CLAIM

The structural detail is the one that matters. Trade credit was routinely worth materially more than cash for the same item, and it could only be redeemed in GameStop. That converts a customer's residual value into a closed-loop currency: the second number becomes demand for your own inventory rather than money leaving the building. No producer in this cohort achieved that without owning the redemption.

The trade-in that is not really a trade-in

Smartphone trade-in is the case most often cited as proof that residual value drives upgrades. The published values do not support that reading. US carriers advertise trade-in credits that far exceed the standalone market value of the same handset, delivered as bill credits spread over 24 or 36 months, conditional on porting a number, activating a line, staying on a qualifying plan, and not paying the device off early. FACT

That is not residual value. It is a subscriber acquisition subsidy denominated in residual value, and the leash is the point. The device is the pretext for the contract. INFERENCE

Certainty as the product

Certified pre-owned is the oldest formalised version of Choice C. The first manufacturer program launched in 1993, and the motive was residual defence: manufacturers who had underwritten lease residuals needed a channel that would support the values they had promised. REPORTED The certification premium on cars is modest, roughly 4.3% to 4.7% for a three-year-old vehicle. REPORTED

The same structure priced very differently in watches, where authenticity risk is severe and verification is genuinely hard. Certified pre-owned Rolex watches carried premiums reported between roughly 16% and 42% depending on retailer, against the same models sold by non-participating dealers. REPORTED The buyer is not paying for the watch. They are paying to stop worrying about the watch.

Why the trade-in makes buyers less price sensitive

There is a behavioural mechanism underneath all of this that is worth naming, because it explains why trade-in is such an effective margin tool. Experimental work published in 2008 found that consumers in a transaction involving a trade-in act as both buyer and seller, and prioritise getting a good value for the used item over getting a good price on the new one, producing a higher willingness to pay for the new product. FACT

That is the commercial case for a trade-in desk stated honestly. It is not that residual value creates demand. It is that a trade-in moves the customer's attention off your price.

Three failure modes: surplus captured by someone else, residuals underwritten into a soft market, and resale run as a marketing program.

The producer funds the market and the middle captures it

College textbooks is the best-identified negative case available anywhere. Publishers spent decades shortening revision cycles to suppress the used market. The demand estimates say it did not work: students repriced the book, and simulated faster revision cycles produced flat or lower publisher revenue before revision costs. [FACT](#)

Meanwhile the surplus was real and it went to the channel. Bookstores bought back at roughly half the new price and resold at roughly three-quarters, on gross margins around 34% against roughly 23% on new books. [FACT](#) A single textbook could pass through several users after the initial sale with no further revenue to publisher or author. [COMPANY CLAIM](#)

The resolution is instructive. Publishers eventually stopped fighting the second number and eliminated it. Pearson's 2019 shift to digital-first moved print to rental only, broke the print revision cycle, and cut list prices sharply toward digital price points. [FACT](#) The consistent reading is that they finally accepted the theory: if you remove resale, you must also cut price, and what you gain is not margin but control of the channel.

Underwriting a soft market with a known asset

Auto leasing is the largest quantified loss in the cohort, and it happened twice.

Through the 1990s, captive finance arms set inflated residual values to lower monthly payments and drive lease volume. When used prices fell, the gap became real money. A worked example from the period: a 1997 full-size SUV listed at \$36,580 with an expected three-year residual of \$25,606 was worth \$16,500 at auction in 2000, a shortfall of about \$9,100 per unit. [REPORTED](#) Industry-wide losses from mis-set residuals were estimated at \$10.5 billion for 2000 and around \$5 billion for 2003. [ESTIMATE](#)

Then it happened again with better data and bigger numbers. In the second quarter of 2008, Ford Credit recorded a pre-tax impairment of \$2.1 billion on North American operating leases after concluding that lease-end residuals on full-size trucks and traditional SUVs would come in far below expectation. [FACT](#) Ford Credit ended 2008 with a \$1.5 billion net loss, more than explained by that charge and related items. [FACT](#) Chrysler Financial exited leasing entirely within days; Ford repriced leases on the affected lines to the point of discouraging them. [FACT](#)

Note what was and was not uncertain. Nobody was unsure whether pickup trucks had resale value. The uncertainty was about the level of a mature market, and that is exactly the uncertainty a manufacturer is worst placed to hold, because its own incentive and production decisions move the number it guaranteed.

Trying to abolish the second number

Microsoft's 2013 attempt to restrict used-game resale on Xbox One is the clearest natural experiment on suppression. The policy was announced, the competitor publicly committed to leaving disc resale alone, preorder positions moved against Microsoft, and the policy was reversed within roughly a week. [FACT](#) Preorder rankings shifted back after the reversal. [REPORTED](#)

The buyers were behaving exactly as the textbook demand system predicts. Remove the resale option and willingness to pay falls, immediately and visibly.

Branded resale as a marketing program

Apparel and outdoor gear produced the largest number of launches and the least evidence of primary-market benefit. Two quiet signals are more informative than the launch announcements.

First, REI closed its online used-gear shop in late 2025 while keeping used gear in stores. [REPORTED](#) That is the shape you would expect if the economics break on shipping, grading and handling rather than on demand. Second, the largest resale-as-a-service vendor eliminated upfront and monthly fees for branded resale storefronts entirely in 2025. [FACT](#) A software layer given away is a software layer the customers were not paying for.

The honest reading is that most branded apparel resale is Choice B executed for reasons that are not commercial, and that the public evidence for a primary-market effect is thin. [UNRESOLVED](#)

In the majority of the cohort, residual value stimulated behaviour that someone other than the producer monetised.

This is the finding an executive should sit with longest. Across the cases where a visible second number demonstrably changed buying behaviour, the producer captured the economics in a minority of them, and only where it owned certification or redemption.

VALUE CAPTURE ACROSS THE COHORT

CATEGORY	WHO CAPTURED IT	WHAT THEY CONTROLLED
College textbooks	Bookstores, used wholesalers, later online marketplaces	The buyback counter and the used inventory. Publishers controlled neither.
Autos, lease era	Dealers via certified pre-owned, auction houses, the residual data provider	Remarketing and price authority. Captives held the risk and took the losses.
Physical games	The specialist retailer	Trade credit redeemable only in its own stores, plus both sides of the transaction.
Smartphones	Carriers	The credit instrument and the service contract it is chained to. Handset makers set list price; carriers set the effective price.
Luxury watches	Independent dealers for decades, then the brand	Authentication. The brand captured it by asserting sole authority to certify, then buying the retailer.
Sneakers	Marketplaces and resellers during the premium era, nobody after	Liquidity and price discovery. The brand never participated in the second transaction.
Branded apparel resale	The software and logistics vendors	Intake, grading and fulfilment infrastructure, which is the actual scarce capability.

Residual value visibility is a demand event that occurs in your market and settles in someone else's. Whether you participate is a separate decision from whether it happens.

The two producer wins in this set, watches and games, share a structural feature rather than a category feature. Both involved a step the customer could not perform themselves and would pay to avoid: authenticating a watch, or converting a shelf of used discs into spendable value today. Where no such step exists, the producer has nothing to sell into the second transaction. INFERENCE

The boundary is real. The threshold is not, and the evidence does not support pretending otherwise.

The brief asked whether something changes when the expected resale price exceeds the purchase price. It does, but not as a clean line. What changes is the identity of the buyer. Below the line, the buyer is a user protecting a downside. Above it, a meaningful share of buyers are holding inventory, and inventory demand behaves nothing like consumer demand.

WHAT CHANGES ABOVE THE LINE

LOSS MITIGATION

Buyer is the end user

Demand responds to product quality

GAIN SEEKING

Buyer may never use the product

Demand responds to the resale chart

Extra supply meets unmet demand	Extra supply destroys the reason to buy
Residual acts as a floor under price	Residual becomes the whole proposition
Producer can raise output safely	Every unit added breaks a promise to the last buyer

The producer's revenue peaks before the secondary price does. By the time the resale chart turns, the primary sale has already been made to people who are now sellers.

Two cases carry this section. In sneakers, the average premium paid on new releases of the signature retro model fell from a peak near 61% in 2020 to about 4% in 2023, with some 2023 colourways trading below list. [REPORTED](#) Across the market, the share of releases trading above retail fell from roughly 58% in 2020 to about 47% in 2024. [REPORTED](#) Industry participants attribute the compression to oversupply and heavy discounting rather than to taste alone. [REPORTED](#)

In collectibles, the 1990s plush toy boom is the fully completed version of the same arc. Annual sales at the manufacturer went from around \$280 million in 1996 to roughly \$1.4 billion in 1998, driven by deliberate scarcity, retirements and a fast-growing online resale market. [REPORTED](#) Production was then raised into the demand, a blanket retirement announcement in 1999 triggered panic selling rather than a price rise, and resale values collapsed. [REPORTED](#) At the peak, the category accounted for a large share of activity on the dominant auction platform, which flagged fad concentration as a business risk in its own filings. [FACT](#)

What the cohort cannot establish is causation in the reverse direction. Falling secondary prices and falling primary demand moved together in both cases, but supply increases, discounting, macro conditions and simple taste change are confounded. Whether the resale collapse *caused* the primary decline, or both were caused by the same oversupply, is not separable from public data. [UNRESOLVED](#)

The usable conclusion is narrower and still actionable: once appreciation is part of why people buy, supply policy stops being an operations decision and becomes a pricing decision, and the producer is now managing a market rather than a product line.

08 / THE EARLIEST SIGNAL

The signal is elasticity, not participation. Participation is the one everyone watches and it is the one that misleads.

Ranked by how well the historical record actually supports them, with the false signals included because they are the ones companies act on.

SIGNALS, RANKED BY EVIDENCE

01	Your elasticity moves with resale events, not your price	STRONG	The textbook identification. Conversion changes around events that alter resale value while your own price is constant. This is the only signal in the cohort that is observable before anyone builds anything, and the only one that directly measures the thing you care about.
02	A third party publishes credible prices for your product	STRONG	Independent price authority preceded producer action in every case examined, usually by years. If buyers can cite a number you did not publish, the second number already exists in your market.
03	Someone else's P&L depends on your used units	STRONG	A retailer, dealer network or carrier with a material margin line built on your asset. This is what actually triggered producer action historically, which is precisely why it is a late signal rather than an early one.
04	Competitors surface residual value at the point of sale	MODERATE	Once one participant puts the second number in the purchase flow, the comparison exists whether or not you join. Observed in autos and in phones.
05	Trade-in participation is rising	WEAK, OFTEN MISLEADING	Trade-in value returned to US consumers rose sharply through 2025 while the average age of devices at turn-in reached record highs, above four years for some categories. REPORTED Participation rose and the replacement cycle lengthened at the same time. Participation tracks promotion intensity, not preference.

The practical version of signal one: find a moment when the expected resale value of your product changed without your price changing. A competitor launched a buyback. A platform started publishing prices. A model was discontinued. Measure conversion around it. If conversion moved, the second number is already in your customer’s arithmetic and you are choosing whether to participate, not whether it exists.

Companies underwrite while believing they are advertising.

This mistake appears often enough, and expensively enough, to be the single most useful thing in the study. A subsidised residual set to hit a monthly payment target does not read internally as risk transfer. It reads as a promotion. It is booked as marketing. But it is a written put option on your own used market, at a strike you chose for sales reasons, over a horizon you cannot hedge, on an asset whose price your own future output and incentive decisions will move.

The contrast with participants who understand the instrument is stark. In aircraft, residual value guarantees are disclosed as off-balance-sheet arrangements, capped, and conditioned on tight asset return standards. One manufacturer’s average guaranteed residual was around 15% of original sale price in one year’s disclosure and around 11% the next, with exercise windows a decade or more out.

FACT That is a company that knows it is short an option and has priced, capped and reserved accordingly.

Two supporting errors travel with it:

Launching Choice B and staffing it like Choice A.

Branded resale is intake, grading, cleaning, authentication, storage, fulfilment and a materially harder customer service load than new goods. The programs that retrenched retrenched on logistics, not on demand.

Treating trade-in participation as evidence of demand effect.

Participation responds to promotion generosity. In the best-measured category, participation and value returned rose while the replacement cycle lengthened. The two moved in opposite directions.

Gate first, then choose. And keep the tiers separate, because most of this is not a rule.

The gate. Is a credible second number for your product already discoverable from a source you do not control? If yes, you are deciding whether to participate in an existing market. If no, you are deciding whether to *create* one, which is a different and much worse-evidenced decision. Nothing in this cohort shows a producer successfully manufacturing residual-value salience from nothing. The markets formed first, independently, and the producers arrived later.

- Pattern** — this is what repeatedly happened in the cohort. It carries no claim that it will happen to you, and in several cases the sample is small or the confounds are unresolved. Treat it as a prior to test, not a decision.
- Heuristic** — a defensible default given the evidence, worth adopting unless your own data says otherwise. Reversible on local evidence, and the local evidence should win.
- Rule** — supported strongly enough that departing from it should require a specific argument. There is one below. A framework with more than one or two of these is usually a framework that has stopped reading its own evidence.

If independent data already shows your retained value beats the alternative → surface it.

You are citing evidence, not creating it, and if your retained value is average or worse you are handing a competitor a comparison axis. Weakly held because the underlying demand effect is unmeasured in both directions. The defensive half of this — don't publish a number you lose on — is better supported than the offensive half.

PATTERN, SMALL SAMPLE

If the customer is already in your channel and the goods do not have to move → facilitating is more likely to survive.

In-store take-back persisted across the cohort; mail-in and online-only take-back is where retrenchment shows up. But this is a handful of cases, closures are systematically under-reported, and the online programs were also the newer and more marketing-driven ones, so channel and vintage are confounded. It is a good question to ask about your own program, not a finding that settles it.

HEURISTIC

If condition or authenticity risk is high enough that buyers pay for certainty → capture.

The observed certainty premium runs from roughly 4% where verification is easy to more than 40% where it is hard and the brand is the only credible authority. The durable part is not the range, which is two categories, but the arithmetic: does the premium you can charge cover refurbishment, authentication, inventory and returns? Run that before building anything. If it does not, you are subsidising the secondary market.

HEURISTIC, N=1

If the uncertainty is about whether the category holds value at all → a guarantee may buy something real.

One clean case supports this, and one case is not a finding. What makes it worth carrying is that the entry logic and the exit logic agree: the guarantee was written against category risk and withdrawn once the category had its own price history. If you cannot describe the condition under which you would withdraw yours, you are not using it for this purpose.

PATTERN, STRONGLY SUPPORTED

Guarantees written against the price level of a mature market are where the losses cluster.

Two large episodes, one industry, roughly a decade apart, with billions in documented and estimated losses. The mechanism is specific: you cannot hedge it, your own volume and incentive decisions move the number you guaranteed, and the strike gets set by whoever needs the monthly payment to work. This is not an argument that it can never be done — the aircraft cases underwrite mature-market residuals and do not produce comparable losses. It is an argument that doing it demands the structure below.

RULE – THE ONLY ONE HERE

If you guarantee a residual, cap the exposure, condition it on return standards, reserve for it, and set the strike outside the sales organisation.

This is the one place the cohort speaks with one voice. Every documented loss came from a guarantee that was uncapped, unreserved, or struck for volume reasons. Every guarantee that was capped, conditioned and disclosed as what it is produced no comparable loss, including in a category with far longer horizons and far more volatile asset values. The variable that separated the outcomes was structure, not category, not asset, not size.

HEURISTIC

If the used unit substitutes cleanly for the new one and someone already handles the transaction cheaply → stay out.

You have no step to sell into the second transaction, so there is nothing to capture. Your leverage is in product architecture and price. The textbook resolution — remove the resale option and cut price to match — is the coherent version of this, and it took the industry decades to reach.

PATTERN, TWO COMPLETED CASES

If expected resale exceeds purchase price → you are running a market, not a product line.

Both completed arcs show the producer raising output into the peak and compressing the premium that was driving demand. Whether the compression caused the primary decline is not separable from the supply expansion that accompanied it, so treat this as a warning about supply policy rather than a proven causal chain. The transferable part: revenue peaks before the secondary price does, and a meaningful share of your buyers are holding inventory.

One cross-cutting heuristic, strongly held. Before any of the four choices, decide what instrument the second number is paid in. Cash leaves. Store credit stays. Bill credits chain the customer to a contract. Certification sells trust rather than goods. Across seven categories the instrument tracked who captured the surplus more reliably than the category, the product, or the size of the residual. It is an association across cases rather than a tested mechanism, which is why it stops short of a rule, but it is the most consistent regularity in the study.

Fourteen cases, selected for variation in outcome and quality of evidence.

THE HISTORICAL COHORT

CASE	CHOICE	OUTCOME
College textbooks, 1997–2001 demand study	A, INVOLUNTARY	Buyers fully priced the resale option. Elasticity roughly –0.9 with no revision risk against –3.7 with certain revision. Publisher revenue near-invariant to revision speed. The anchor case of the study. <u>FACT</u>
College bookstore channel	C, BY THE MIDDLE	Buyback at roughly half new price, resale at roughly three-quarters, gross margin near 34% against 23% on new. The surplus the publishers were fighting for. <u>FACT</u>
Pearson digital-first, 2019	EXIT	Print moved to rental only, revision cycle broken, prices cut toward digital levels. The second number removed rather than fought. <u>FACT</u>
Auto captive finance, 1990s	D	Subsidised residuals drove lease volume, then produced estimated industry losses of \$10.5 billion in 2000. Per-unit shortfalls above \$9,000 on some SUV lines. <u>ESTIMATE</u>
Ford Credit, 2008	D	\$2.1 billion pre-tax impairment on North American operating leases in Q2; \$1.5 billion full-year net loss. The best-documented residual loss in the cohort. <u>FACT</u>
Chrysler Financial, 2008	D, ABANDONED	Exited consumer leasing outright within days of the Ford charge. A competitor withdrawing from the instrument entirely. <u>FACT</u>
Manufacturer certified pre-owned, from 1993	C	Built to defend residuals the captives had already underwritten. Certification premium roughly 4.3% to 4.7% on a three-year-old vehicle. <u>REPORTED</u>
Tesla resale value guarantee, 2013–2016	D, THEN EXIT	Solved category uncertainty for an unproven asset class. \$1.58 billion liability disclosed at March 2016; program ended 1 July 2016 with residuals reportedly above the floor. <u>FACT</u>
GameStop trade-in	C	Pre-owned gross margin near 48% against roughly 21% on new software, with trade credit worth more than cash and redeemable only in store. The strongest capture case. <u>ESTIMATE</u>
Xbox One used-game policy, 2013	SUPPRESSION	Announced and reversed within roughly a week after the competitor committed to unrestricted disc resale. Willingness to pay fell exactly as the textbook model predicts. <u>FACT</u>
US carrier trade-in promotions	B DISGUISED AS A	Advertised credits far above standalone device value, paid as bill credits over 24 to 36 months, conditional on port-in, plan and no early payoff. Subsidy, not residual. <u>FACT</u>
Rolex certified pre-owned, from 2022	C	Entered a mature independent secondary market decades late, certified on sole authority, priced at reported premiums of roughly 16% to 42%, then acquired the pilot retailer. <u>REPORTED</u>
Sneaker resale, 2020–2024	NONE, BRAND ABSENT	Signature retro premium fell from about 61% to about 4%; share of releases above retail fell from roughly 58% to 47%. Supply expansion and the premium collapse are confounded. <u>REPORTED</u>
Plush collectibles, 1996–2000	SPECULATION	Sales from roughly \$280 million to \$1.4 billion on manufactured scarcity, then collapse after production expansion and a mishandled retirement announcement. <u>REPORTED</u>
Branded apparel and gear resale, 2013–2026	B	Many launches, little public evidence of primary-market effect. Online used-gear retrenchment in 2025 and a vendor eliminating platform fees are the informative signals. <u>REPORTED</u>
Aircraft residual value guarantees	D, CORRECTLY STRUCTURED	Disclosed off balance sheet, capped, conditioned on return standards, average guaranteed residual disclosed near 15% then 11% of original sale price. The control case for how to hold this risk. <u>FACT</u>

WHAT WOULD CHANGE THE ANSWER

Three findings would move this materially.

A controlled test showing that surfacing residual value at checkout lifts conversion or average selling price, holding price and promotion constant. Nothing in the public record establishes this, and it is the claim the resale industry makes most often. If it exists inside a company's own experiment data, it would upgrade Choice A from a comparison weapon to a demand lever.

Published unit economics for a branded apparel resale program showing contribution after intake, grading, logistics and service. Every figure available today is either category-level market sizing or vendor-sourced.

Evidence separating the resale premium collapse from the supply expansion that accompanied it in sneakers. That would convert the study's weakest section from directional to identified, and would tell producers whether the second number is a cause of primary demand or a symptom of it.

Methodology and limitations

SOURCES

Peer-reviewed economics and marketing research where identification exists; SEC filings and quarterly reports for the residual-loss and guarantee-liability figures; company filings and investor materials for program descriptions; carrier and retailer published terms for current program mechanics; contemporaneous trade and business reporting for program launches, reversals and retrenchments; marketplace and pricing-service data for secondary prices. Figures published by companies selling the solution being measured are labelled and treated as directional.

EVIDENCE LABELS

Fact — established by primary documents, filings, published terms, or peer-reviewed research with credible identification. **Company claim** — stated by a party with an interest in the claim. **Reported** — carried by credible third-party reporting without primary confirmation. **Estimate** — calculated or attributed to a named estimating party, with assumptions visible. **Inference** — a conclusion drawn across cases and labelled as such. **Unresolved** — the public record cannot answer the question.

PRE-REGISTERED DECISION RULES, AND WHAT WAS KNOWN FIRST

This is a literature and record review, not a blind study, and pretending otherwise would be dishonest. The textbook demand result and the 2008 auto lease impairments were known before the cohort was assembled and shaped the questions asked. That is disclosed rather than hidden.

The rules set before evaluating the remaining cases: stimulation would require a demand or conversion change tied to a resale-relevant event with price held constant; trade-up would require an ASP or mix shift attributable to the residual mechanism rather than to promotion; accelerated replacement would require ownership cycles shortening as residual salience rose; cannibalisation would require producer revenue or margin falling as secondary supply grew, with substitution demonstrated rather than assumed; producer capture would require margin recognised on the second transaction; and speculation would require evidence that buyers were not users. Applying these rules is what demoted trade-in participation from a signal to a false signal, and what kept the sneaker section labelled unresolved.

KNOWN WEAKNESSES

The identification is concentrated in one category. The textbook study carries more analytical weight in this artifact than any other single source, and its setting is unusually clean: single-semester ownership, observable assignment and purchase, administratively fixed prices, and a resale-destroying event that varies independently of price. Whether the estimated forward-lookingness generalises to a \$60,000 car or a \$1,000 phone is an assumption, not a finding.

Survivorship runs through the failure analysis. Quiet discontinuations of branded resale programs are systematically under-documented; launches are announced and closures are not. The retrenchments cited here surfaced through secondary reporting rather than company statements, and there are almost certainly more.

The single most commercially important claim in the field is unproven either way. No public source establishes that surfacing residual value at the point of sale changes conversion, and none establishes that it does not. The textbook evidence establishes something adjacent but distinct: that buyers priced expected resale value without anyone surfacing it. Reading that as proof that surfacing it adds nothing would be converting an absence of evidence into evidence of absence, and an earlier draft of this artifact did exactly that. Salience, credibility, precision and immediacy are all plausible amplifiers, and the record does not test any of them.

Reverse causality is unresolved in luxury and sneakers. Desirable products command resale premiums because they are desirable. No credible shock in the record separates the direction of causation, so this

artifact does not claim one.

The carrier trade-in reading is an inference from published promotional terms rather than from carrier disclosure of promotion economics. The terms are unambiguous about the conditions; the internal accounting is not public.

Weighing whether the second number belongs in your first sale?

PastBehavior studies how the same decision has already played out in adjacent markets, separates the durable patterns from the attractive stories, and turns that evidence into pricing, product and channel decisions before your own outcome is known.

Independent market-structure research. Compiled from public filings, published terms and peer-reviewed sources. Fieldwork 012, August 2026.